Panasonic

ideas for life

Industry-leading Flat Panel Displays

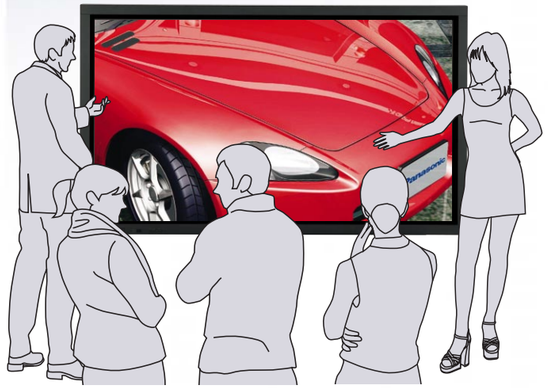
Have assembly and installation done by a qualified electrician.
Simulated pictures on screen.
Specifications are subject to change without notice. Printed in Japan
EUR05S-01

Image Quality and Versatility that Lead the Industry

Panasonic's business-use flat panel displays lead the industry in image quality and functions and are available in screen sizes from 32 to 65 inches.

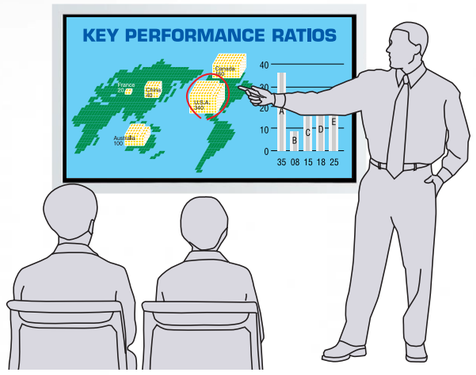
Because flat panel displays are used in a variety of applications, they must meet a range of requirements. They must offer clear, faithful images. And they must provide advanced functions, screen sizes large enough for the installation location, and selectable cabinet colours (in this case, black or silver) to match their surroundings.
Panasonic flat panel displays provide all that and more. Our quest to lead the industry in image quality and innovative functions has led to a new lineup of eleven models in five sizes and two cabinet colours.
Throughout this new lineup you'll see Panasonic's commitment to providing high-performance flat panel displays that meet the widest range of professional applications.

65HD



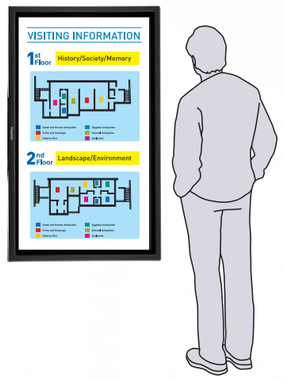
The 65-inch plasma display has the powerful presence needed to draw attention in even a large event area. With its large screen and high resolution, this unit displays images that look clear and crisp even from a distance. It's also suitable for lecture halls and amusement facilities.

50HD



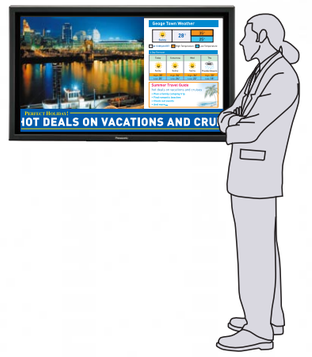
At business meetings, presentations and other situations calling for powerful visual impact, you can count on this 50-inch high-definition plasma display. An optional touch panel adds sophistication and ease. The system can be upgraded to display handwritten notes for even greater persuasive power.

42HD/SD



When set up for portrait display, this 42-inch plasma display is similar in size and aspect ratio to a movie-size poster. Use it as a moving image poster. Or upgrade the system with a scheduling function that displays content according to the correct time zone, and use it as a digital signboard.

37SD



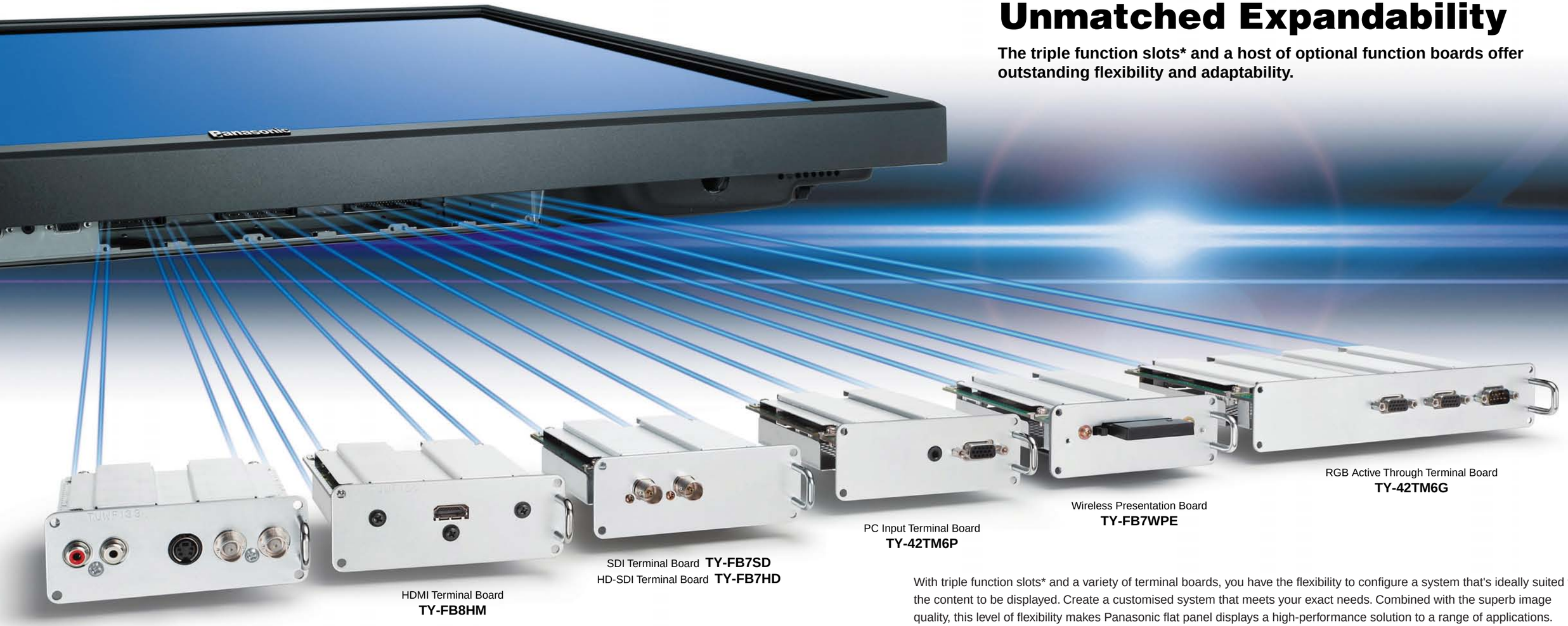
The 37-inch plasma display fits well in stores. It can display images from two video sources at the same time, making it ideal for information display in stores, show windows and other uses.

32HD

The 32-inch LCD display is perfect when space is at a premium. Function slots let you customise the unit for a specific application. This panel is suitable for displaying both text and still images.

Unmatched Expandability

The triple function slots* and a host of optional function boards offer outstanding flexibility and adaptability.



BNC Composite Video Terminal Board
TY-42TM6B

HDMI Terminal Board
TY-FB8HM

SDI Terminal Board **TY-FB7SD**
HD-SDI Terminal Board **TY-FB7HD**

PC Input Terminal Board
TY-42TM6P

Wireless Presentation Board
TY-FB7WPE

RGB Active Through Terminal Board
TY-42TM6G

With triple function slots* and a variety of terminal boards, you have the flexibility to configure a system that's ideally suited to the content to be displayed. Create a customised system that meets your exact needs. Combined with the superb image quality, this level of flexibility makes Panasonic flat panel displays a high-performance solution to a range of applications.

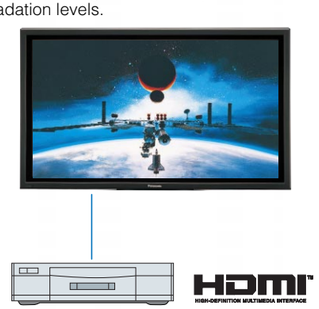
* TH-37PWD8 series and 32LHD7 series are equipped with dual function slots.

With Analogue Equipment

Video terminal boards let you connect an S-VHS VCR or video camera. The TY-42TM6B has a video output terminal too, so you can also connect a sub-monitor device for monitoring images.

With Digital Equipment

The next-generation standard digital interface, HDMI terminal board digitally transfers video and audio signals over a single cable. Connect a compatible DVD player via an HDMI terminal, and the plasma display can reproduce images with the equivalent of 4,096 gradation levels.

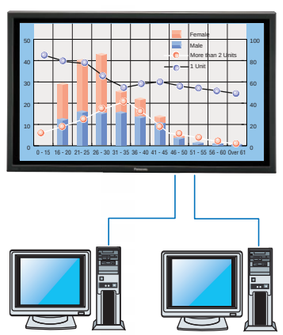


With Broadcast Equipment

SDI/HD-SDI terminal boards are compatible with the SDI or HD-SDI (for HDTV) systems used in broadcasting studios. Panasonic displays are compatible with HD-SDI signals. With these boards, the display can reproduce crisp, clear images in a studio or control room.

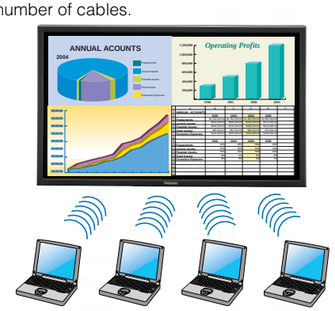
With Multiple PCs

A PC input terminal board lets you connect multiple PCs. This can be ideal in conference rooms, classrooms, lecture halls and other sites where PCs are often used.



Wireless PC Connection

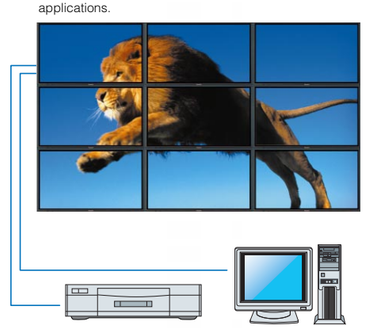
A wireless presentation board lets you display signals from up to four notebook PCs at the same time. This makes it easy to get a presentation or meeting underway quickly, without the time and trouble of connecting a number of cables.



Multi-Screen System

The RGB active-through terminal board lets you daisy-chain a number of panels to create a multi-screen plasma display system.

Note: TH-32LHD7 series cannot be used in multi-screen applications.



Industry's Best Picture Quality

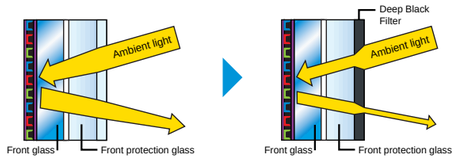
Industry's Best*1 Bright-Area Contrast of 340:1*2 — Deep Black Filter*3

The front protective glass of the plasma display panel incorporates a Deep Black Filter that suppresses light transmittance and slashes the amount of external light reflected. This technology helps these displays achieve the industry's highest contrast ratio of 340:1*2 when viewed in bright surroundings.

*1: As of July 1, 2005.
*2: For 42˝ SD model. Measured at 100 lux.

Conventional

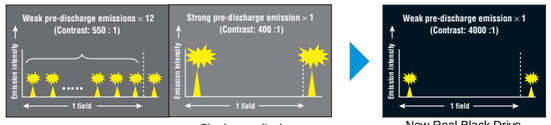
Panasonic plasma panel



Industry's Highest Level of Dark-Area Contrast — New Real Black Drive System*3

By reducing the pre-discharge emission when reproducing black, the New Real Black Drive System provides deeper, richer blacks and a stunning 4000:1 contrast*4. The result is dramatically enhanced image clarity and realism.

*4: For SD models.



Weak pre-discharge drive system

Single pre-discharge drive system

New Real Black Drive System

Industry's Highest Level of Gradation Steps — Advanced Real Gamma System*3

Panasonic plasma display series uses ultra-precise, maximum 14-bit signal processing to produce vividly rich details. The Advanced Real Gamma System then takes it another step further with full-time, full-pixel 1,536-step gradation and 2,048-step dark-area gradation. This level of gradation brings intricate details and more faithful colour reproduction to all scenes, dark and bright.

* The equivalent of 4,096 steps of gradation can be displayed with DVI or HDMI connection.

Dark areas are not shown clearly.

Dark scenes have finer detail.

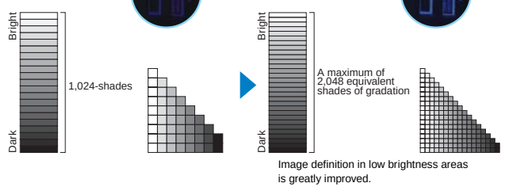


Image definition in low brightness areas is greatly improved.

Conventional

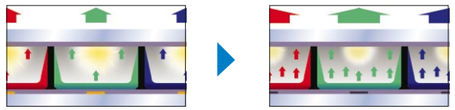
Advanced Real Gamma

Industry's Highest Level of Brightness — Advanced Plasma Panel*3

Panasonic plasma display panels feature a bounded cell structure in which wall-like ribs are used to wrap each individual cell. By increasing the area in which the phosphor can be applied, this dramatically improves both light-emitting efficiency and intensity. Furthermore, by optimizing the gas composition ratio, lighting efficiency has been increased by about 15%. The result is the industry's highest level of brightness. You see crisp and clear images even in bright rooms.

Conventional

Panasonic plasma panel



Images are crisp and clear even in bright rooms.

Long Service Life of 60,000 Hours*3

A new drive circuit and inner panel improvements give Panasonic plasma panels a long service life of approximately 60,000 hours*5 even with their increased brightness. A newly developed phosphor also raises the plasma displays' resistance to static-image screen burning to the same level as CRT displays.

*5: The time until panel brightness is reduced to half its initial level, when displaying moving images at standard mode. Excludes afterimages and malfunctions.

High-Precision MPD Noise Reduction*3

This technology dramatically reduces MPD (Motion Picture Disturbance) noise to deliver crisp, clean moving images. Using a Panasonic original algorithm, it detects motion patterns that tend to generate noise and makes the necessary adjustments to maximise image quality.

Conventional

MPD Noise Reduction

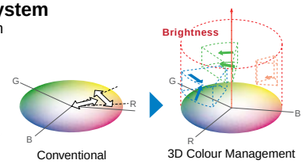
Active I/P Conversion

The Active I/P (Interlace/Progressive) Conversion system detects slow movements more precisely by increasing the range for detecting moving-picture and still-picture pixels. This reduces I/P conversion noise that often occurs when reproducing tiny movements, thereby producing crisper images while raising the vertical resolution in interlaced images.

3D Colour Management System

The 3D Colour Management System achieves precise control based on 3D management in the colour difference plane and brightness directions. This finer level of control produces more expressive images.

Note: The default setting for the 3D Colour Management System is OFF.



Conventional

3D Colour Management

Adaptive AGC

Adaptive AGC raises contrast while suppressing noise by detecting and boosting only the image edges.

Note: The default setting for the Adaptive AGC is OFF.

Advanced LCD Panel (TH-32LHD7 series)

Boasting an HD panel with 1,366 x 768 pixels, the TH-32LHD7 series LCD model relays all the detailed beauty of high-definition images. It achieves excellent brightness of 500 cd/m² with high contrast of 800:1. The result is vibrant, finely nuanced images even in brightly lit rooms. The viewing angle of 170° in both horizontal and vertical directions ensures superior legibility over a wide area.

*3: These features found on only plasma models.

Advanced Usability

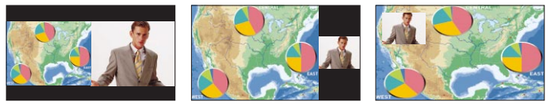
Advanced Dual Picture Mode

Panasonic plasma displays feature a new Advanced Dual Picture Mode in addition to the conventional Dual Picture Mode. This new mode lets you overlay a video image onto a full-screen PC image. For example, you can superimpose text information from a PC over a video clip, giving you a more effective way to present information. When displaying two separate images, you can select the audio output from either source (previous models reproduced audio from the main source only). Playing back the audio from the sub-source can be useful in teleconferencing, for example.

Note: Plasma models cannot display two images when both are from component video or RGB (PC) signal sources. The Advanced Dual Picture Mode may not work properly with some video signals and is not available on the TH-32LHD7 series.

Advanced Dual Picture Mode

Dual Picture Mode



Picture-And-Picture

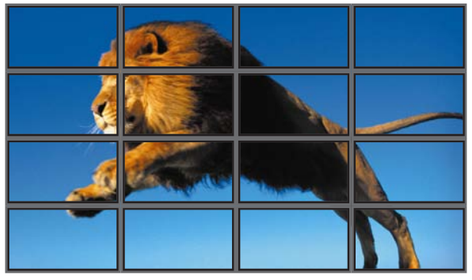
Picture-Out-Picture

Picture-In-Picture

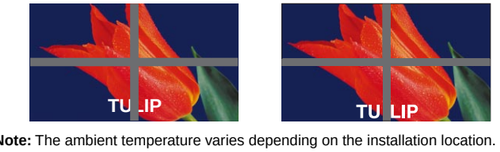
Remote System Monitoring

In addition to the conventional display control command and power supply/input selection check command, Panasonic flat panel displays feature a new monitor command that lets you check the signal from a distant location. In conventional systems, you had to install a monitoring camera to check the images displayed on an advertising display panel or digital signage system. This new monitor command, on the other hand, lets you monitor images by simply connecting a PC via a serial cable.

Multi-Screen Applications*3



The built-in image-enlarging function makes it easier to set up a multi-screen display system with four (2 x 2), nine (3 x 3), or 16 (4 x 4) units. Thanks to the ID control function, you can use the standard remote control unit to control multiple panels individually. There is also a mode that displays a full-screen image, including the edges (the width of the frame) of the display panel — something not possible with previous systems. This is especially suitable for displaying text information, since no words are hidden by the frame.



Note: The ambient temperature varies depending on the installation location. Provide sufficient air conditioning for surrounding conditions.

User-Friendly Remote Control*3

Redesigned for easier operation, the remote control unit now features a Power Off button and Direct input select buttons. It also allows ID control in a multi-screen system.

4x Digital Zoom

This function lets you enlarge a portion of an image by up to four times normal size and display it on the full screen. Use this function to give your presentations greater impact.

Note: Digital Zoom does not work in Dual Picture mode. Images of SXGA resolution or higher from a PC or RGB source may not enlarge correctly. Some degradation occurs when images are enlarged.

Vertical Mounting*3

The 65-inch, 50-inch and 42-inch models can be positioned vertically to display portrait images, allowing them to serve as effective storefront signboards. There's no need to install an optional fan kit.

Note: When using the display vertically, set it so the power button is on top. The 37-inch & 32-inch models cannot be positioned vertically.

New Cabinet Design*3

Panasonic plasma displays (other than 65-inch model) introduce simple, slim front bezel design. Control buttons and the Power button are set on the bottom surface. This gives the panels a smooth, clean look while also helping prevent accidental operation and tampering.

Enhanced Screen Saver Functions*3

A variety of screen saver functions help minimise the risk of uneven phosphor aging. You can also use the timer to set the screen saver operating cycles, operating time, and start and stop times. This lets you make settings that match your application.

- **White Bar Scroll:** White bars move across the screen from left to right at regular intervals. Good for ordinary still-image displays.
- **Screen Reversal:** Displays images with the black and white reversed. Good for text displays.
- **Side Panel Adjustment:** Brightens the black bands on the sides of the screen when displaying images in the 4:3 format.
- **Wobbling:** Shifts the image's position by several pixels at fixed time intervals.
- **Peak Limit Mode:** Lowers the peak brightness level (image contrast) by 30%.

Energy-Saving Functions

A broad range of environment-friendly functions help minimise energy consumption.

- **DPMS (Display Power Management Signaling)**

Power is automatically turned on or off in response to a sync signal from the PC connected to the built-in PC input terminal.

- **Auto Power Off**

When you're using a device connected to the multi-function slots, the display panel goes into standby mode after about 10 minutes if no sync signal is received.

- **Power Save Mode**

Reduces the display's brightness.

- **Standby Power Save Mode**

Reduces power consumption when on standby. (Start-up may take a few moments once the display is in this mode.)

Sound Menu*3

The Sound Menu gives you a choice of three sound settings (Standard/Dynamic/Clear) to best match the kind of input source.

Fan-Less Quiet Operation*3

Our "silence engineering" has eliminated the need for a fan — and fan noise — giving you the kind of quiet operation that makes for a more pleasant viewing experience.
(TH-65PHD8, 50PHD8 and 42PHD8 series feature a noise-suppressing silence design.)

*3: These features found on only plasma models.

Industry's Best Expandability

Multi-Function Slots

In addition to the fixed input interface, the Panasonic flat panel display has three (or two) interchangeable slots that let you add different combinations of optional terminal boards. This gives you the flexibility to add digital or analogue capabilities, as necessary, and to customise your system for specific needs.

Multi-Function Slots on 65˝, 50˝ and 42˝ Models

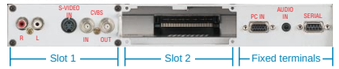
These models come equipped with the standard terminal board mounted in slot 1. You can mount optional terminal boards in slots 2 and 3. Or, you can remove the standard terminal board and mount up to three optional boards.

TH-65PHD8/50PHD8/42PHD8/42PWD8 series

Multi-Function Slots on 37˝ and 32˝ Models

37˝ models come equipped with the standard terminal board mounted in slot 1, and you can mount optional terminal board in slot 2. 32˝ models come with the standard terminal boards mounted in slots 1 and 2. You can remove the standard boards and mount one or two optional boards.

TH-37PWD8 series



TH-32LHD7 series

Optional Terminal Boards

RGB Active Through Terminal Board (mounts in slots 1 & 2)

TY-42TM6G

- Sends the signal that's input via the PC IN terminal to a second display connected to the PC OUT terminal. This connectability adds convenience when configuring a multi-screen system.

The characters in red are added for explanation.

RGB (Digital) Terminal Board (DVI-D w/HDCP) (mounts in slot 1 or 2)

TY-42TM6D

- Lets you connect a PC or other compatible digital equipment that outputs digital RGB signals (DVI-D compliant).
- Adding this board permits you to display images with the equivalent of 4,096 gradation levels*1.

*1: For plasma display models only.

HDMI Terminal Board (mounts in slot 1 or 2; for plasma models only)

TY-FB8HM

- Enables fully digital connection of signals from HDMI-compatible DVD players and other digital equipment for blur-free images with no colour bleeding.
- Adding this board permits you to display images with the equivalent of 4,096 gradation levels*1.

Specifications

Standards compliance	HDMI ver.1.1
Compatible video format	525/60p, 625/50p, 750/60p, 750/50p, 1125/60i, 1125/50i, VGA60

* High-Definition Multimedia Interface and HDMI are trademarks of HDMI Licensing, LLC.

BNC Component Video Terminal Board (mounts in any slot)

TY-42TM6A

BNC Composite Video Terminal Board (mounts in slot 1 or 2)

TY-42TM6B

Composite/Component Video Terminal Board (mounts in slots 1 & 2, or slots 2 & 3)

TY-42TM6Y

RCA Component Video Terminal Board (mounts in any slot)

TY-42TM6Z

RCA Composite Video Terminal Board (mounts in slot 1 or 2)

TY-42TM6V

PC Input Terminal Board (mounts in any slot)

TY-42TM6P

- Lets you display images from two or more PCs.

* Does not support the DPMS function.

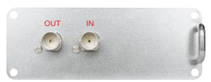
SCART Terminal Board (mounts in slot 1 or 2; for plasma models only)

TY-FB8SC

SDI/HD-SDI Terminal Board (mounts in slot 1 or 2)

SDI Terminal Board **TY-FB7SD**

HD-SDI Terminal Board **TY-FB7HD**



- Supports the serial digital interface (SDI) used in broadcasting.
- Provides fully digital transmission for clear, clean image displays.
- The TY-FB7HD supports HDTV.

Specifications

	TY-FB7SD	TY-FB7HD
Standards compliance	SMPTE259M-C	SMPTE292M, SMPTE259M-C
Compatible video format	525/59.94i 625/50i	525/59.94i, 625/50i, 750/60p: 59.94p, 1125/30p, 1125/24p, 1125/60i: 59.94i, 1125/50i, 1125/24sF: 23.98sF

Wireless Presentation Board (mounts in slot 1)

TY-FB7WPE

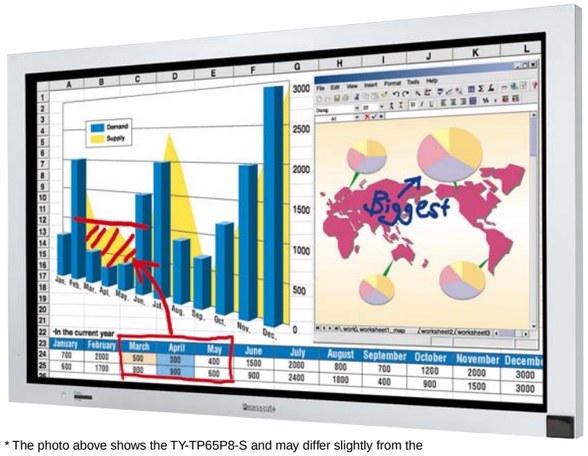
- Allows wireless connection (IEEE 802.11b compliant) of the flat panel display and a PC.
- The Multi Live Mode displays up to four PC screens simultaneously.
- The Live Mode projects the screen from one PC onto the entire flat panel display.
- Lets you control flat panel displays with a Web browser.

4-Screen Style

Index Style

Options

Touch Panel



* The photo above shows the TY-TP65P8-S and may differ slightly from the actual final product appearance of TY-TP50P8-S and TY-TP42P8-S.

TY-TPEN6 Touch Pen also available.

TY-TP65P8-S (for TH-65PHD8 series)
TY-TP50P8-S (for TH-50PHD8 series)
TY-TP42P8-S (for TH-42PHD8/42PWD8 series)

This add-on touch panel lets you write directly onto the screen with a light touch. Ideal for adding written comments during a presentation or meeting.

- Highly reliable optical sensor system
- Outstanding resolution, easy operation
- Thin design makes a precise fit with display screen
- Lets you use display as a "whiteboard"

	TY-TP65P8-S
Applicable display devices	Panasonic 65˝ plasma display
Power supply (voltage)	DC + 5V ±10% (Through USB)
Electric current	DC + 5V, Max 400mA
Detection system	Infrared ray interruption
Panel aperture (W x H)	1455 x 826 mm
Detection range (W x H)	1440 x 812 mm
Effective detection range	Above detection range + 1.0 mm top, bottom, right, and left
Operating modes	Input point, Continuous, Moving end point detection*
Resolution (W x H)	2881 x 1625*
Detection pitch	2.0 x 2.0 mm
Output system	Coordinate output
Optical elements	361 (H) x 204 (V)
Optical element pitch	4.0 x 4.0 mm
Minimum stylus	6.0 x 6.0 mm
Scan speed	First touch: 45 msec/frame max. Moving: 10 msec/frame max.
Interface	USB1.1 compliant; Signal: +DATA, -DATA, VCC, GND; I/F connector: TYPE B
Panel shape	Integrated flat panel controller
Dimensions (W x H x D)	1598 x 951 x 72 mm
Depth when mounted	170 mm
Weight (excluding brackets)	5.0 kg
Escutcheon (frame)	Aluminum
USB driver/Applicable OS	Microsoft Windows® 98SE/2000/ME/XP

* When using the specific driver software.

Detachable Stereo Speakers

Photo shows TY-SP42P8W-K.

Photo shows TY-SP42P8W-S.

TY-SP65P7W-K (for TH-65PHD8EK/BK)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 100 x 925 x 90 mm
Weight: 2.2 kg/each

TY-SP50P8W-K (for TH-50PHD8EK/BK)
TY-SP50P8W-S (for TH-50PHD8ES/BS)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 107 x 724 x 88 mm
Weight: 2.0 kg/each

TY-SP42P8W-K
(for TH-42PHD8EK/BK, 42PWD8EK/BK)
TY-SP42P8W-S
(for TH-42PHD8ES/BS, 42PWD8ES/BS)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 107 x 610 x 88 mm
Weight: 2.0 kg/each

TY-SP37P8W-K (for TH-37PWD8EK/BK)
TY-SP37P8W-S (for TH-37PWD8ES/BS)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 107 x 550 x 88 mm
Weight: 2.0 kg/each

TY-SP32L7W-K (for TH-32LHD7EK/BK)
TY-SP32L7W-S (for TH-32LHD7ES/BS)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 102 x 500 x 102 mm
Weight: 1.9 kg/each

Plasma System Solutions

Digital Signage/Narrowcasting System Complete with Touch Panel

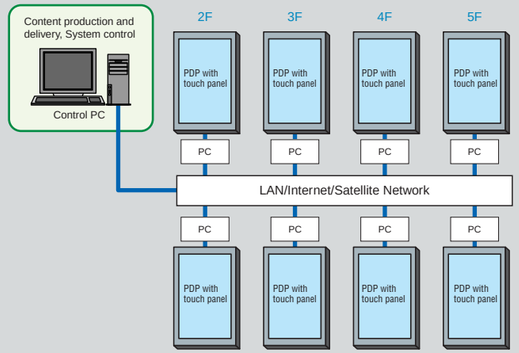
Easy, interactive content distribution system for retail chains and public spaces such as shopping malls, office buildings and hotels

• Constructing a Multi-Language Environment
In contrast with conventional methods, in which several information panels are prepared in different languages, this digital system allows visitors to simply touch the panel itself to switch to the language they want. It is a highly effective and efficient way to offer people the content that they want to see.

• Flexible Content Control
Each PC connected to the Plasma has a unique IP address, allowing content to be streamed to the Plasma on any LAN, modem, Internet or Satellite network. It speeds up the process of updating information, and any combination of Plasmas can be controlled locally or from a central location.

• Universal System Design
Since the entire system can be configured in a Windows environment, it requires no special software for content production or operation.

System Configuration



* You can configure a 50-inch display and control system by simply combining the TH-50PHD8 series Plasma Display and TY-TP50P8-S Touch Panel, then connecting the PC to the plasma display.

* Content is distributed by a centralized control PC in an office and stored in the hard disk of each PC, ready to be displayed by touch panel operation.

Multi-Presentation System Using a Variety of Peripheral Equipment

Supports diverse video sources. Mount peripherals to the plasma display to take advantage of its detailed images and wide viewing angle.

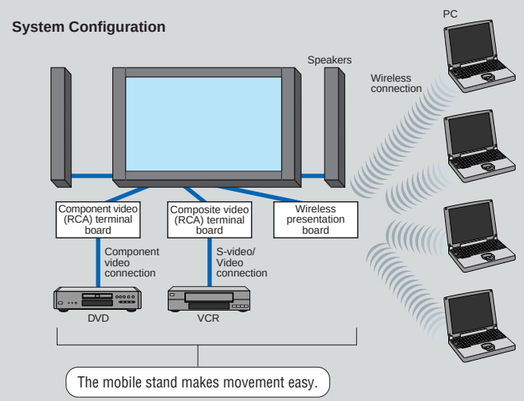
• No Complicated Connections
You can connect multiple notebook PCs to a single plasma display by simply making the appropriate network settings. Naturally, this means that the conference room is neater, because there are no connection cables to clutter it up. The display can also be controlled by the PCs.

• Display Four PC Screens at the Same Time
It is easy to hold group presentations, because the screen images of up to four PCs can be displayed simultaneously.

• A Wealth of Functions in a Compact System
The large screen and wide viewing angle of the plasma display make it ideal for use in discussions. You can optimise it even further by adding an array of peripheral equipment:
- Mounting a component video terminal board lets it receive the input of high-resolution DVD signals.
- Mounting a composite video terminal board enables connection of various analog equipment.

You can select the input for whichever video source you want easily with the remote control. And you can mount the entire system to a wheeled stand, for easy movement.

System Configuration



The devices can be selected by switching the input to the plasma display.

* When equipped with the TY-FB7WPE Wireless Presentation Board, the TY-42TM6V Composite Video Terminal (RCA) Board, and the TY-42TM6Z Component Video Terminal (RCA) Board, the 50-inch Plasma Display is ready to connect to a wide range of equipment.

* The TY-ST42PF3 Mobile Stand with casters (see page 19 for details).

HD-SDI/SD-SDI System for Broadcast Use

Displays crisp, clear images in a studio or control room.

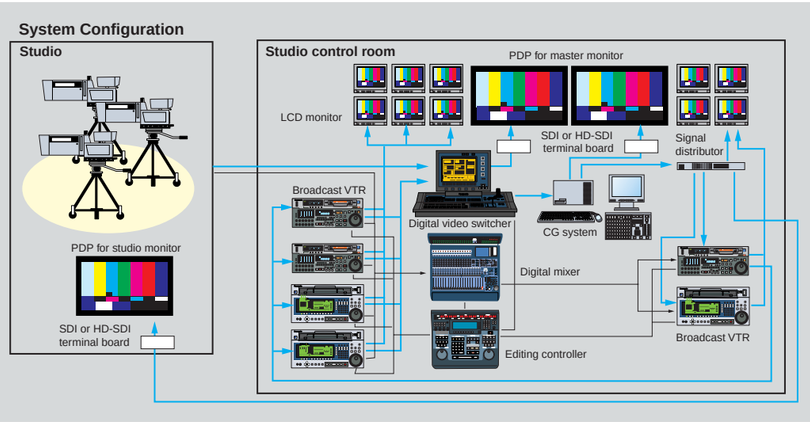
• Adapts Easily to HD-SDI/SD-SDI Systems
The PDP adapts easily to HD-SDI and SD-SDI, the digital interfaces used in broadcasting and video production. Simply plug the SDI or HD-SDI terminal board into the function slot.

• Larger Screen with Wider Viewing Angle
Large PDP screens range from 42 to 50 inches — a big advantage over the maximum 32-inch screen available with conventional HD-CRT monitor displays for broadcast use. PDP screens also offer a wider viewing angle and easier, more comfortable monitoring.

• Saves Rack Space
With its thin profile, a PDP takes up less rack space than a CRT monitor.

• Ideal as a Studio Monitor
When the PDP is used as a studio monitor display, its large screen and wide viewing angle provide superior viewing for performers and production crew. The PDP also requires little installation space and is easy to move. When a 65-inch PDP is used for recording a programme with a live audience, it helps create a livelier, upbeat atmosphere.

System Configuration



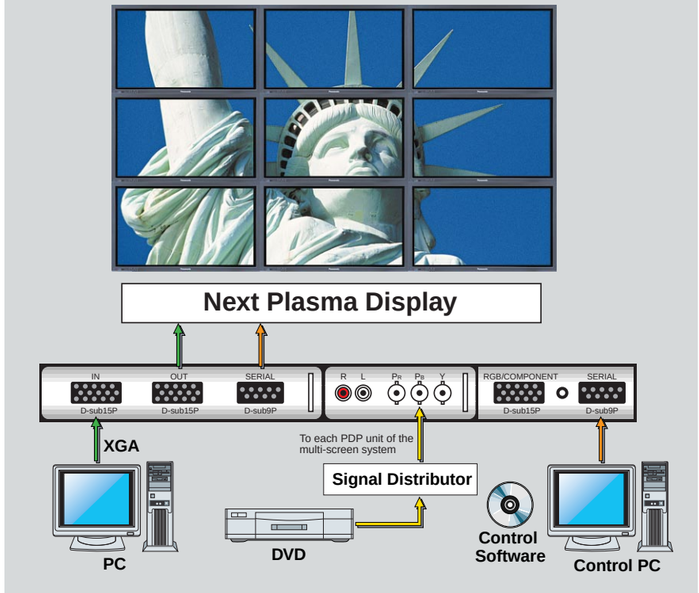
Multi-Screen System Using RGB Active Through Terminal Board

Eye-catching huge display system at shopping malls and event sites

• Easy-to-Configure Multi-Screen System at a Low Cost
This system shows DVD video and PC data on a giant 9-screen (3 x 3) display. This system, which requires no image enlargement device, makes it possible to have a multi-screen system at a low cost.

• Easy-to-See Information
The system displays enlarged XGA images with excellent quality.

• Various Display Patterns and Powerful Impact
A "control PC" connected through a serial interface lets you switch the input sources and control various display patterns.



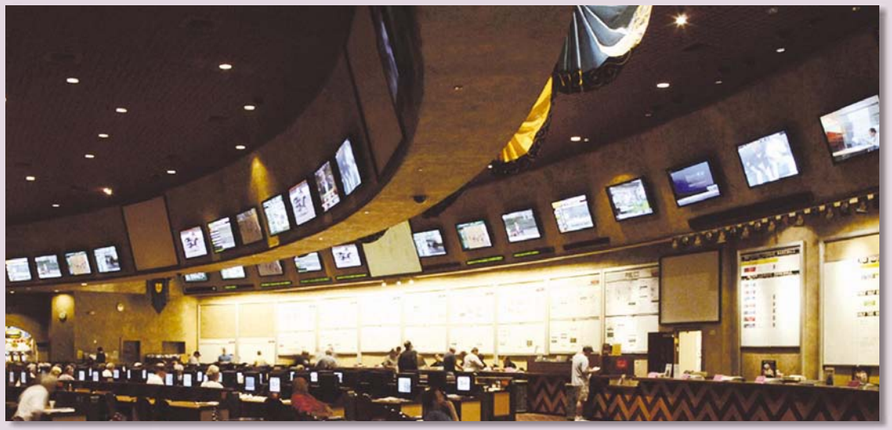
An Endless Array of Applications

In-Store Display

Shopping Mall, Panama

TESCO, London, UK

Amusement



Sunset Stations Casino,
Las Vegas, USA
(30 units of 65˝ displays)

Bowling Alley, Tokyo, Japan

Education

School, Addis Ababa, Ethiopia

Ritsumeikan University, Kusatsu, Japan

Information

Sumitomo Mitsui Bank,
Kobe, Japan

Hospitality

Marina Mandarin Hotel, Singapore

TV Production

Asahi Broadcasting Corporation, Osaka, Japan

Line Up

Plasma HD Models

TH-65PHD8EK/BK
65-inch (165 cm) diagonal
High Definition Plasma Display

TH-50PHD8E/B
50-inch (127 cm) diagonal
High Definition Plasma Display

TH-42PHD8E/B
42-inch (106 cm) diagonal
High Definition Plasma Display

Plasma SD Models

TH-42PWD8E/B
42-inch (106 cm) diagonal
Wide Plasma Display

TH-37PWD8E/B
37-inch (94 cm) diagonal
Wide Plasma Display

LCD HD Models

TH-32LHD7E/B
32-inch (80 cm) diagonal
High Definition LCD Display

Specifications

Model Number		TH-65PHD8EK/BK	TH-50PHD8EK/ES/BK/BS	TH-42PHD8EK/ES/BK/BS	TH-42PWD8EK/ES/BK/BS	TH-37PWD8EK/ES/BK/BS
Power Source		220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz
Power Consumption		615 W	395 W	295 W	240 W	215 W
	Power off condition	0.35 W	0.3 W	0.3 W	0.1 W	0.1 W
	Stand-by condition	Save On: 0.7 W Save Off: 0.9 W	Save On: 0.6 W Save Off: 0.8 W	Save On: 0.6 W Save Off: 0.8 W	Save On: 0.9 W Save Off: 1.2 W	Save On: 0.9 W Save Off: 1.2 W
Plasma Display Panel		Drive method: AC type 65-inch, 16:9 aspect ratio	Drive method: AC type 50-inch, 16:9 aspect ratio	Drive method: AC type 42-inch, 16:9 aspect ratio	Drive method: AC type 42-inch, 16:9 aspect ratio	Drive method: AC type 37-inch, 16:9 aspect ratio
Contrast Ratio		3000:1	3000:1	3000:1	4000:1	4000:1
Screen Size	W x H	1,434 x 806 mm	1,106 x 622 mm	920 x 518 mm	920 x 518 mm	818 x 461 mm
	Diagonal	65˝ (1,645 mm)	50˝ (1,269 mm)	42˝ (1,056 mm)	42˝ (1,056 mm)	37˝ (939 mm)
Number of Pixels		1,049,088 (1,366 [W] x 768 [H])	1,049,088 (1,366 [W] x 768 [H])	786,432 (1,024 [W] x 768 [H])	408,960 (852 [W] x 480 [H])	408,960 (852 [W] x 480 [H])
Audio Output (10% THD)		20 W (10 W + 10 W)	16 W (8 W + 8 W)	16 W (8 W + 8 W)	16 W (8 W + 8 W)	16 W (8 W + 8 W)
Operating Conditions		Temperature: 0°C — 40°C; Humidity: 20 % — 80 % (Non condensation)				
Dimensions (W x H x D)		1,554 x 925 x 99 mm	1,210 x 724 x 95 mm	1,020 x 610 x 89 mm	1,020 x 610 x 89 mm	920 x 550 x 89 mm
Weight		78.0 kg	43.0 kg	31.5 kg	29.5 kg	25.0 kg
EMC		EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3				
Safety Standards		EN60065				
Colour System		NTSC, PAL, PAL 60, SECAM, Modified NTSC				
Applicable PC Signals		XGA (Signals exceeding XGA are compressed and displayed.)			VGA (Signals exceeding VGA are compressed and displayed.)	
Terminals (Slot-type)	AV	VIDEO IN/OUT (BNC): 1.0 Vp-p (75-ohms or high-impedance) S-VIDEO (Mini DIN 4-pin): Y: 1.0 Vp-p (75-ohms), C: 0.286 Vp-p (75 ohms) AUDIO IN L/R (RCA pin jack x 2): 0.5 Vrms (high impedance)				
(Fixed)	PC	(Mini D-sub 15-pin) fH: 15 — 110 kHz; fV: 48 — 120 Hz R,G,B: 0.7 Vp-p (75-ohms) Y: 1.0 Vp-p (75-ohms; including sync) P_B, P_R/C_B, C_R: ± 0.7 Vp-p (75-ohms); HD, VD/1.0 — 5.0 Vp-p (high impedance) Audio In (M3 jack): 0.5 Vrms (high impedance)				
	SERIAL	External control terminal (D-sub 9-pin), RS-232C compatible				

Model Number		TH-32LHD7EK/ES/BK/BS
Power Source		220 - 240 V AC, 50/60 Hz
Power Consumption		165 W
	Power off condition	0.4 W
	Stand-by condition	Save On: 0.8 W Save Off: 1.0 W
LCD Display Panel		a-Si TFT active matrix 32-inch, 16:9 aspect ratio
Viewing Angle		Horizontal: 170°, Vertical: 170°
Contrast Ratio		800:1
Screen Size	W x H	697.7 x 392.3 mm
	Diagonal	32˝ (800.4 mm)
Number of Pixels		1,049,088 (1,366 [W] x 768 [H])
Audio Output (10% THD)		16 W (8 W + 8 W)
Operating Conditions		Temperature: 0°C — 40°C; Humidity: 20 % — 80 % (Non condensation)
Dimensions (W x H x D)		805.0 x 499.6 x 102.0 mm
Weight		17.0 kg
EMC		EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3
Safety Standards		EN60065
Colour System		NTSC, PAL, PAL 60, SECAM, Modified NTSC
Applicable PC Signals		XGA (Signals exceeding XGA are compressed and displayed.)
Terminals (Slot-type)	AV	VIDEO IN/OUT (BNC): 1.0 Vp-p (75-ohms or high-impedance) S-VIDEO (Mini DIN 4-pin): Y: 1.0 Vp-p (75-ohms), C: 0.286 Vp-p (75 ohms) AUDIO IN L/R (RCA pin jack x 2): 0.5 Vrms (high impedance)
	COMPONENT/RGB	Y/G (BNC): 1.0 Vp-p/composite (75-ohms); 0.7 Vp-p/non-composite (75 ohms) P_B, P_R/C_B, C_R (BNC): 0.7 Vp-p (75 ohms); R/B (BNC): 0.7 Vp-p (75 ohms) AUDIO IN L/R (RCA pin jack x 2): 0.5 Vrms (high impedance)
(Fixed)	PC	(Mini D-sub 15-pin) fH: 15 — 110 kHz; fV: 48 — 120 Hz R,G,B: 0.7 Vp-p (75-ohms) Y: 1.0 Vp-p (75-ohms; including sync) P_B, P_R/C_B, C_R: ± 0.7 Vp-p (75-ohms); HD, VD/1.0 - 5.0 Vp-p (high impedance) Audio In (M3 jack): 0.5 Vrms (high impedance)
	SERIAL	External control terminal (D-sub 9-pin), RS-232C compatible

Remote Control

Supplied Remote Control for PHD8/PWD8 series

(Comes with every Panasonic Plasma Display model.)

Remote Control Functions

- Power On
- Power Off
- Direct Input Selection (1/2/3/PC)
- Input Selection
- Status
- Surround On/Off
- Sound Mute On/Off
- Volume Up/Down
- Normalization (N)
- Exit (R)
- Position/Action
- Digital Zoom
- Dual Picture (MULTI PIP/SWAP/SELECT/MOVE)
- Picture
- Sound
- Set Up
- Picture Position/Size
- Aspect
- PC Mode Selection
- Off Timer
- Normal/ID Remote Selection
- ID Number Set
- ID All

Supplied Remote Control for TH-32LHD7 series

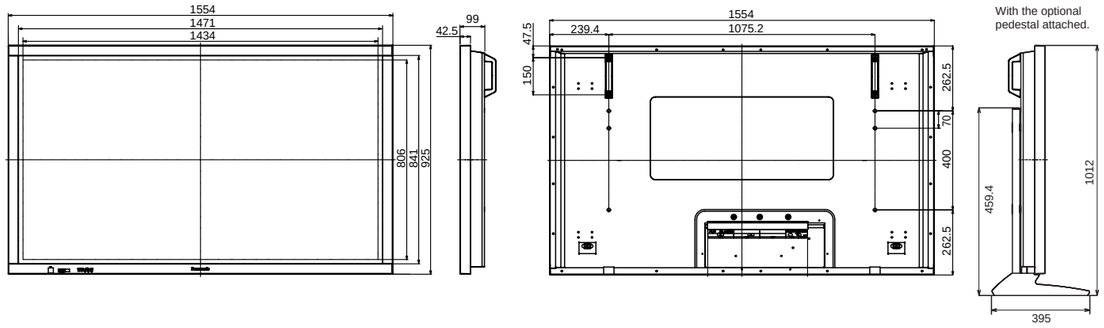
Remote Control Functions

- Stand-by (On/Off)
- Input Selection
- Status
- Surround On/Off
- Sound Mute On/Off
- Volume Up/Down
- Normalization (N)
- Exit (R)
- Position/Action
- Digital Zoom
- Dual Picture (MULTI PIP/SWAP/SELECT/MOVE)
- Picture
- Sound
- Set Up
- Picture Position/Size
- Aspect
- PC Mode Selection
- Off Timer

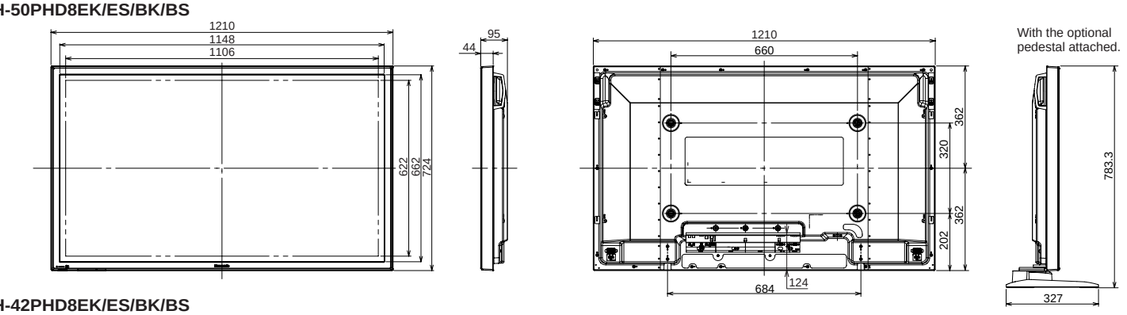
Dimensions

(Unit: mm)

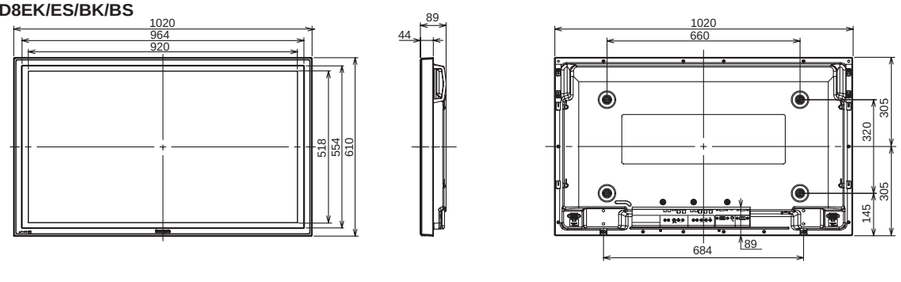
TH-65PHD8EK/BK



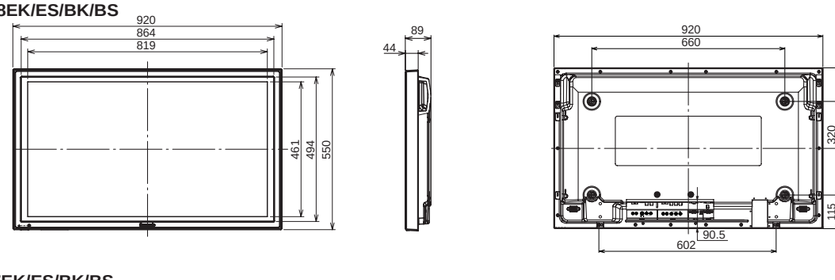
TH-50PHD8EK/ES/BK/BS



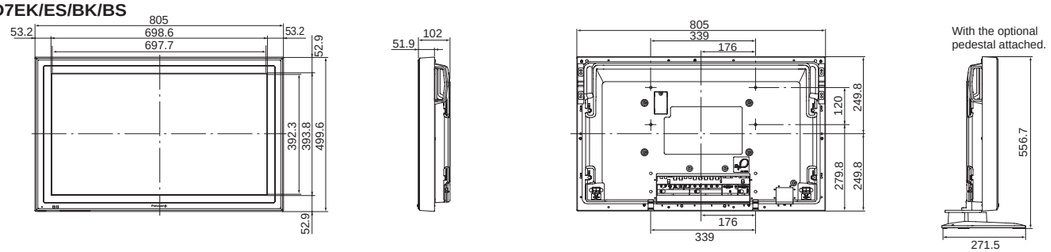
TH-42PHD8EK/ES/BK/BS
TH-42PWD8EK/ES/BK/BS



TH-37PWD8EK/ES/BK/BS



TH-32LHD7EK/ES/BK/BS



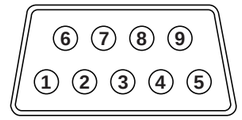
Preset Input Signals

	Signal name	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Standard-Equipped Terminals	Optional Board									
					TY-42TM6Y	TY-42TM6B/N	TY-42TM6A/Z	TY-42TM6P	TY-42TM6D	TY-42TM6G	TY-FB7SD	TY-FB7HD	TY-FB8HM	TY-FB8SC
Composite	NTSC	15.73	59.94	Y	Y	Y								Y
	PAL	15.63	50.00	Y	Y	Y								Y
	PAL60	15.73	59.94	Y	Y	Y								Y
	SECAM	15.63	50.00	Y	Y	Y								Y
	Modified NTSC	15.73	59.94	Y	Y	Y								Y
Component	525 (480)/60i	15.73	59.94	Y	Y		Y	Y		Y	Y	Y		
	525 (480)/60p	31.47	59.94	Y	Y		Y	Y	Y	Y			Y	
	625 (575)/50i	15.63	50.00	Y	Y		Y	Y		Y	Y	Y		
	625 (575)/50p	31.25	50.00	Y	Y		Y	Y	Y	Y			Y	
	750 (720)/60p	45.00	60.00	Y	Y		Y	Y	Y	Y		Y	Y	
	750 (720)/50p	37.50	50.00	Y	Y		Y	Y	Y*1	Y			Y	
	1125 (1080)/60i	33.75	60.00	Y	Y		Y	Y	Y	Y		Y	Y	
	1125 (1080)/50i	28.13	50.00	Y	Y		Y	Y	Y*1	Y		Y	Y	
	1125 (1080)/24p	27.00	24.00	Y	Y		Y	Y		Y		Y		
	1125 (1080)/24sf	27.00	48.00	Y	Y		Y	Y		Y		Y		
	1125 (1080)/25p	28.13	25.00	Y	Y		Y	Y		Y		Y		
	1125 (1080)/30p	33.75	30.00	Y	Y		Y	Y		Y		Y		
	1250 (1080)/50i	31.25	50.00	Y	Y		Y	Y		Y				
RGB	640 x 400 @70Hz	31.46	70.07	Y	Y		Y	Y		Y				
	640 x 480 @60Hz	31.47	59.94	Y	Y		Y	Y	Y	Y			Y	
	640 x 480 @72Hz	37.86	72.81	Y	Y		Y	Y		Y				
	640 x 480 @75Hz	37.50	75.00	Y	Y		Y	Y		Y				
	640 x 480 @85Hz	43.27	85.01	Y	Y		Y	Y		Y				
	852 x 480 @60Hz	31.47	59.94	Y	Y		Y	Y	Y	Y				
	800 x 600 @56Hz	35.16	56.25	Y	Y		Y	Y		Y				
	800 x 600 @60Hz	37.88	60.32	Y	Y		Y	Y	Y	Y				
	800 x 600 @72Hz	48.08	72.19	Y	Y		Y	Y		Y				
	800 x 600 @75Hz	46.88	75.00	Y	Y		Y	Y		Y				
	800 x 600 @85Hz	53.67	85.06	Y	Y		Y	Y		Y				
	1024 x 768 @60Hz	48.36	60.00	Y	Y		Y	Y	Y	Y				
	1024 x 768 @70Hz	56.48	70.07	Y	Y		Y	Y		Y				
	1024 x 768 @75Hz	60.02	75.03	Y	Y		Y	Y		Y				
	1024 x 768 @85Hz	68.68	85.00	Y	Y		Y	Y		Y				
	1152 x 864 @75Hz	67.50	75.00	Y	Y		Y	Y		Y				
	1280 x 960 @60Hz	60.00	60.00	Y	Y		Y	Y		Y				
	1280 x 960 @85Hz	85.94	85.00	Y	Y		Y	Y		Y				
	1280 x 1024 @60Hz	63.98	60.02	Y	Y		Y	Y		Y				
	1280 x 1024 @75Hz	79.98	75.03	Y	Y		Y	Y		Y				
	1280 x 1024 @85Hz	91.15	85.02	Y	Y		Y	Y		Y				
	1600 x 1200 @60Hz	75.00	60.00	Y	Y		Y	Y		Y				
	1600 x 1200 @65Hz	81.25	65.00	Y	Y		Y	Y		Y				
	1066 x 600 @60Hz	37.88	60.32	Y	Y		Y	Y	Y	Y				
	1366 x 768 @60Hz	48.36	60.00	Y	Y		Y	Y	Y	Y				
	Mac 13″ (640 x 480)	35.00	66.67	Y	Y		Y	Y		Y				
	Mac 16″ (832 x 624)	49.72	74.54	Y	Y		Y	Y		Y				
	Mac 21″ (1152 x 870)	68.68	75.06	Y	Y		Y	Y		Y				

*1: The TH-32LHD7 series does not accept these signal formats.

Note: When a signal having a resolution that exceeds the panel resolution is input, a simplified display will be produced.

Serial RS232C: D-Sub 9-Pin (Female)



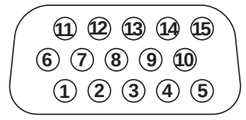
Pin Assignment and Signal Name

Pin No.	Signal name	Descriptions
1	CD	NC
2	RXD	Receive Data
3	TXD	Transmit Data
4	DTR	Not used
5	GND	Ground
6	DSR	Not used
7	RTS	Short Circuit
8	CTS	
9	RI	NC

Transmitting Conditions

Signal Level	Complied with RS232C
Synchronous System	Start/Stop Synchronous Communication
Baud Rate	9600 bps
Parity	Nil
Character Length	8 bits
Stop Bit	1 bit
X Parameter	Nil

PC Input: D-Sub 15-Pin (Female)



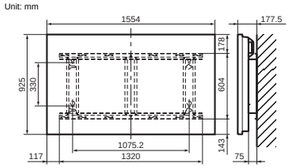
Signal Name

Pin No.	Signal name
1	R (PR/CR)
2	G (Y)
3	B (PB/CB)
4	GND (Ground)
5	GND (Ground)
6	GND (Ground)
7	GND (Ground)
8	GND (Ground)
9	NC (Not connected)
10	GND (Ground)
11	GND (Ground)
12	SDA
13	HD/SYNC
14	VD
15	SCL

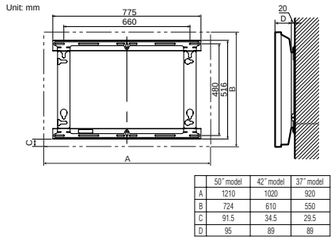
Mounting Options

Wall-hanging bracket

TY-WK65PV7

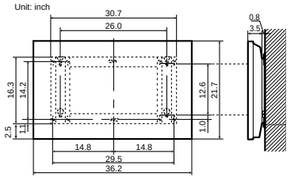


TY-WK42PV7



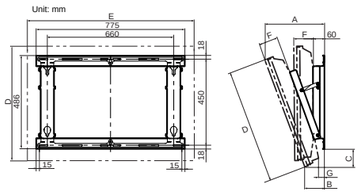
	50" model	42" model	37" model
A	1210	1020	920
B	724	610	550
C	91.5	34.5	29.5
D	95	89	89

TY-WK37PV3



Wall-hanging bracket (angled)

TY-WK42PR7

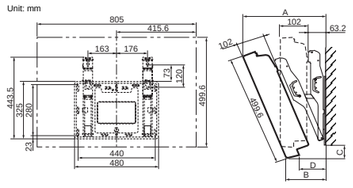


50" model					
R	0°	5°	10°	15°	20°
A	155	200	243	285	325
B	155	137	119	99	80
C	130	137	145	152	156
D	724				
E	1210				
F	95				
G	60	57	42	26	11

42" model					
R	0°	5°	10°	15°	20°
A	149	188	226	264	299
B	149	135	121	107	92
C	73	80	88	95	101
D	610				
E	1020				
F	89				
G	60	50	40	29	19

37" model					
R	0°	5°	10°	15°	20°
A	149	185	221	256	289
B	149	138	127	115	102
C	43	50	53	57	60
D	550				
E	920				
F	89				
G	60	53	45	37	29

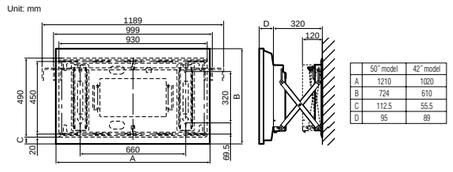
TY-WK32LR1S



	0°	5°	10°	15°	20°
A	6.5	8.1	9.5	11.0	12.3
B	6.5	6.4	6.3	6.1	5.8
C	0.1	0.4	1.0	1.4	1.9
D	4.5	4.3	4.2	4.0	3.8

Wall-hanging bracket (drawer type)

TY-WK42DR1



	50" model	42" model
A	1210	1020
B	724	610
C	112.5	55.5
D	95	89

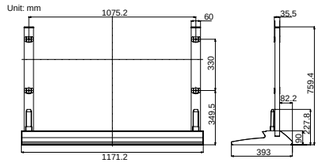
Compatible Models at a Glance

●: Compatible; —: Not compatible

	TY-ST65-K	TY-ST08-K/S	TY-ST07-K	TY-ST32L7-K/S	TY-WK42DR1	TY-WK65PV7	TY-WK42PV7	TY-WK37PV3	TY-WK42PR7	TY-WK32LR1S	TY-ST42PW1	TY-ST42PF3	TY-CE42PS7
TH-65PHD8 series	●	—	—	—	—	●	—	—	—	—	—	—	—
TH-50PHD8 series	—	●	● (EK/BK)	—	●	—	●	—	●	—	●	●	●
TH-42PHD/42PWD8 series	—	●	● (EK/BK)	—	●	—	●	—	●	—	●	●	●
TH-37PWD8 series	—	●	● (EK/BK)	—	—	—	●	●	●	—	●	—	●
TH-32LHD7 series	—	—	—	●	—	—	—	—	—	●	—	—	—

Pedestal

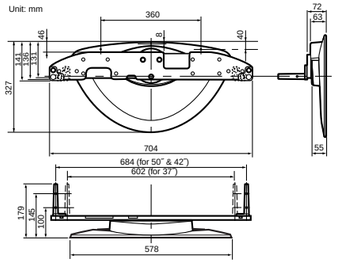
TY-ST65-K



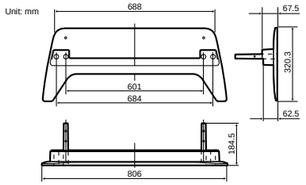
TY-ST08-K/TY-ST08-S

TY-ST08-K

TY-ST08-S



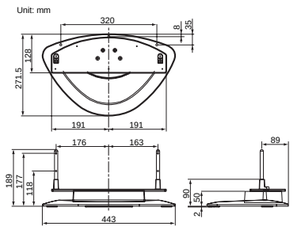
TY-ST07-K



TY-ST32L7-K/TY-ST32L7-S

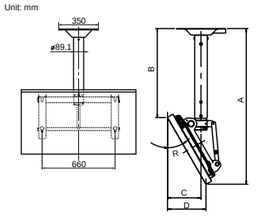
TY-ST32L7-K

TY-ST32L7-S



Ceiling-hanging bracket

TY-CE42PS7



50" model

R	0°			15°			30°		
A	1187	1287	1387	1487	1201	1301	1401	1501	1181	1281	1381	1481
B	466	566	666	766	506	606	706	806	558	658	758	858
C	199				249				286			
D	0				186				360			

42" model

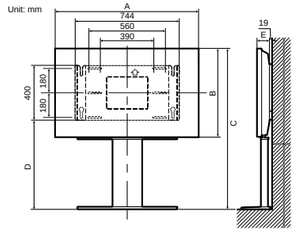
R	0°			15°			30°		
A	1130	1230	1330	1430	1144	1244	1344	1444	1129	1229	1329	1429
B	523	623	723	823	561	661	761	861	604	704	804	904
C	193				228				252			
D	0				157				303			

37" model

R	0°			15°			30°		
A	1100	1200	1300	1400	1115	1215	1315	1415	1103	1203	1303	1403
B	553	571	671	771	589	689	789	889	630	730	830	930
C	193				220				236			
D	0				141				273			

Wall stand

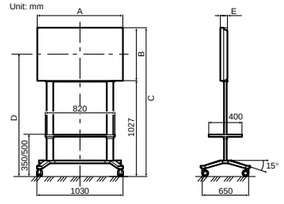
TY-ST42PW1



	50" model	42" model	37" model
A	1210	1020	920
B	724	610	550
C	1230.5	1116.5	1056.5
D	668.5	611.5	581.5
E	95	89	89

Mobile stand

TY-ST42PF3



	50" model	42" model
A	1210	1020
B	724	610
C	1751	1637
D	1389	1332
E	95	89